Journal South Carolina Medical Association

Published Every Month Under the Direction of the Board of Councilors.

Entered as second-class matter December 19, 1911, at the postoffice at Seneca, South Carolina, under the Act of March 3, 1879.

ANNUAL SUBSCRIPTION, $2.00. EDGAR A. HINES, M.D., Editor, Seneca, S. C.

The JOURNAL is published monthly under the auspices of the South Carolina Medical Association. Original articles are solicited. Members who do not receive their copies will please notify the Editor. Correspondents and Secretaries of County Societies are urgently requested to send reports of their meetings and items of news that may be of interest to the profession to the Editor. All articles should be typewritten. Illustrations sent with articles will be printed. For prices of reprints see advertising pages.

All matters must be in the hands of the Editor by the 30th of each month.

Proofs of all original articles appearing in the JOURNAL are revised and corrected by their authors. The JOURNAL is in no sense responsible for expressions in original articles.

Business communications relating to subscriptions and advertising should be addressed to JOURNAL SOUTH CAROLINA MEDICAL ASSOCIATION, Seneca, S. C.

Vol. IX. MAY, 1913 No. 5.

Editorials

Co-operation in the Editorial Department.

The Committee on Publication, at its last meeting, determined to open the Editorial Department of the JOURNAL occasionally to certain members of the Association by special invitation. If this idea meets with a hearty response, as we believe it will, the JOURNAL should become more interesting and instructive. Two excellent editorials are presented in this issue on subjects of vital importance. We believe that the training in Mental Diseases which most physicians have enjoyed has been too superficial to be of much practical value. Again, we believe that Preventive Medicine per se has overshadowed Preventive Surgery, and that the latter deserves more intensive cultivation than it has hitherto received, in this country, at least.

Preventive Surgery.

When we think what the advances in medical knowledge have accomplished in the way of preventive medicine, it is not surprising that we look upon it with wonder. The mere mention of the diseases, *malaria*, *yellow fever*, *tuberculosis*, *typhoid fever*, *plague*, *hookworm*, suggests the means that have been used not only in their cure but also in their prevention. The term Preventive Medicine taken in its broadest sense should include whatever means is used to maintain health, but it has been associated so intimately with sanitary science and internal medicine that we do not think of the other branches of medicine when prevention is mentioned.

Yet may this not also be an aim of surgery? To most, surgery suggests

operative procedure, undertaken to snatch the patient from an inevitable death; and the mistaken idea that surgery is a *dernier ressort* is difficult to eradicate from the mind of the layman, as well as of many physicians. But even history gives instances of preventive surgery. The rite of circumcision, a surgical operation identified with Jewish history, has kept this race more nearly free from venereal contagion than anything else, and in spite of the fact that continence is not characteristic of them. At the present time also, the effect of adherent and redundant prepuce on the nervous state of children is familiar knowledge. The baneful effects of adenoids and hypertrophied tonsils on the development of children can be demonstrated without difficulty, as well as the fact that the tonsils are a source of latent infection which may keep the body far below its normal state. The radical removal of these is certainly preventive surgery.

In the correction of deformity, either congenital or acquired: cleft palate, club foot, rachitic legs, tendon transplantation to replace muscles thrown out of function by infantile paralysis, treatment of tubercular and other inflammatory diseases of bones and joints, all these are in the realm of prevention. The field of so-called "chronic surgery" shows the preventive effect of surgery. Results of childbearing in women often cause many symptoms owing to relaxation of the pelvic floor, and lacerations of the cervix, correction of which means preventing a dragged-out existence with nervous symptoms often accompanied by relaxation of abdominal viscera, and weakness of the trunk muscles. Again when the abdomen is opened for the treatment of some other condition, provided the patient is not jeopardized, removal of the appendix, at the same time is a conservative procedure; for the only condition making appendicitis impossible is absence of the appendix. The removal of fibroids of the uterus before they attain large size and undergo degenerative changes affecting the tone of the heart muscles is a preventive course.

While numerous other applications of prevention in surgery can be adduced, by far the largest field of its usefulness is in preventing cancer invasion. This dread disease exacts a larger toll from human life than any pathological condition; and all the efforts toward its prevention have been fruitless except by removal of the focus before it has begun to spread. Cancer of the breast begins oftenest as a small lump and is frequently noticed to increase under the very eyes of the patient before the physician sees it. Then he may wait until he is positive of its nature—until it is too late. If its removal had been demanded as soon as noticed, and the tumor examined under the microscope, its character determined, and if malignant a radical operation performed, the patient could have been spared. Cancer of the stomach has the highest mortality of all forms of cancer; and in from 50% to 70% of the cases, its origin has been demonstrated in ulcer, a benign affection. In the uterus, too, its occurrence is frequent, and many times it manifests itself by a slight bloody discharge, which few women regard as important. When the persistence of the discharge finally demands investigation, then the advanced growth may be found, and a late operation, made necessary, can offer only a limited chance of recovery. Had the patient consulted a physician as soon as the discharge was noticed the condition would have been found—*provided the physician made a thorough examination*—in its operable stage, and the patient spared the inevitable consequences of malignant in-

vasion.

In the last issue of the *Ladies Home Journal* is an article on Cancer by Samuel Hopkins Adams. His statements are clear and forceful, and should be read carefully by everyone. The quotation of Dr. Mayo, *Delayed Surgery*, is most convincing.

Correction of deformity, relief of pain, saving of life are the indications for surgery. Preventive surgical measures certainly have a place here; and if taken advantage of early enough could increase the saving of life to a remarkable extent. *Not conservatism but conservation.*

Sir William Osler and the Phipps Clinic.

The opening of the Phipps Pyschiatric Clinic in Baltimore on April 16 as a department of the Johns Hopkins Hospital, marks an epoch in the history of American medicine. The growth of Hopkins as the years have gone by, since its beginning in 1889, has been healthy and normal in a way that must be satisfactory to the friends of the institution, as well as to all who are interested in the advancement of medical science and medical education. To the original general hospital, special departments have from time to time been added by special benefactors. The latest of these is the psychiatric clinic with wards for the treatment of acute psychoses which owes its existence to the munificence of Mr. Henry Phipps, of Pittsburg and New York, who gave a million dollars for its erection, equipment and endowment. At the inaugural exercises, which lasted three days, scientists and specialists gathered from all parts of the world to pay homage to the new endowment. Many papers of value were presented to the distinguished audiences, but, as usual, the address of Osler, commands special attention. Sir William chose for his subject: "Specialism in the General Hospital." Following his introductory remarks, which were unusually happy, Sir William said: "The progress in the rational treatment of insanity is a bright chapter in the history of the past century, and full of encouragement." It is the purpose of the new clinic that new methods of treatment be applied and every advance in future be subjected to the test of science. Through the traïning of nurses and the education of medical students, knowledge will be diffused and standards raised. To physicians in asylums the clinic should be an inspiration and help. More than any other distinguished leader in medicine, Osler has always been especially appreciative of the sociological value of the general practitioner. Never before has he made this consideration clearer than in a paragraph in this address: "And I hope room, and plenty of it, will be found for the general practitioner, through whom, more than any other group, the benefits of this institute may be distributed. He needs enlightenment, instruction and encouragement. Enlightenment, as to the vast importance of early deviations from normal mental states. Instruction, in new methods of diagnosis and treatment, and encouragement to feel that in the great fight for sanity in the community, he is the man behind the guns." There are other descriptions of the functions of the new clinic or unit, as Osler likes to term it. But here we have the great practitioner and medical orator at his best. In closing he says: Ninety-nine per cent. of our fellow creatures, when in trouble, sorrow or sickness, trust to charms, incantations, and to the saints. Many a shrine has more followers than Pasteur; many a saint more believers than Lister. Less than twenty years have passed since the last witch was burned in the British Isles." All of which is no doubt true, and more is the

pity, but none the less true, Cardinal Gibbons has seen fit upon the basis of the last quoted paragraph to call Osler to task for an alleged attack on Christianity! It seems Osler's fate to be misunderstood by some, but in spite of his detractors, he stands today in the forefront of the scientific leaders in medicine among English-speaking nations. In the matter and manner of the occassional address he is without a peer and it is always a joy to read his stimulating views on the varied phases of medicine, whether they be of history, or biography or science. The Phipps Clinic could have had no more eloquent and worthy a sponsor. Thus inaugurated and thus endowed it will, no doubt, deserve and command success from the beginning.

Original Articles

MARITIME QUARANTINE.*

By Robert L. Wilson, Passed Assistant Surgeon, United States Public Health Service.

The word "Quarantine" is derived from the French term "quarante" meaning "forty," this being the number of days detention required of vessels in Italy during the fourteenth century on account of plague. The word was thus originally used for what is now called "Maritime Quarantine" as the unqualified term "quarantine" may be applied to various restrictive measures on land or sea to prevent the introduction of disease into a place. Hence, in addition to Maritime Quarantine, we speak also of railroad quarantine, house quarantine, etc.

In the present paper the subject of Quarantine will be considered with special reference to sea-going vessels, their cargoes and people, though measures similar in principle would be applicable to Quarantine in its various phases. In a short article it is impossible to give more than the most important features of the work and to call attention to a few things that may be of some local interest.

Maritime Quarantine is, in our country, principally administered by the National Government. The following diseases are classed as quarantinable by the United States Quarantine Regulations: Cholera, yellow fever, smallpox, typhus fever, leprosy, plague. Other communicable diseases are to be reported to the local health authorities.

Briefly stated the following vessels come under the quarantine regulations: (1) All vessels from foreign ports with certain exceptions along the Canadian and Mexican borders; (2) vessels from domestic ports where cholera, plague or yellow fever is present or smallpox or typhus fever occurs epidemically.

It is required of these vessels that certain regulations varying with the health conditions of the port of departure, the quarantinable disease in question and the kind of shipping be carried out (a) at the port of departure, (b) at sea, (c) at the port of arrival.

(a). Port of Departure. One of these requirements is that a vessel bound for the United States shall procure a bill of health from the American consul at that place. This paper gives the health status of the port as to quarantinable disease, the sanitary condition, in a general way, of the vessel, its food and water supply, the cargo and people aboard. Furthermore, the number of crew and passengers is given, the duration in port of the vessel, whether it docked or lay at anchor and a statement as to any sanitary measures car-

*Read by Title in the Symposium on Hygiene and Preventive Medicine before the South Carolina Medical Association at Rock Hill, S. C., April 16, 1913.

ried out. In some foreign ports on account of the prevalence, or greater danger to us, of quarantinable disease, medical officers of the United States Public Health Service are assigned to duty in connection with the office of the consul to certify to the condition of vessels, cargoes and people as well as such sanitary treatment as the vessel has received. A certificate of fumigation for rats or mosquitoes is often thus given. Passengers may be detained or their effects disinfected. Such precautions are not only a safeguard to the vessels and the United States but may save the ship much valuable time at the American port of arrival.

(b). At Sea. Vessels at sea, as elsewhere, are expected to practice various sanitary measures as in the way of cleanliness, war on rats, mosquitoes and vermin, the isolation of cases of contagious disease. These matters are often more intelligently carried out if a regular ship's surgeon is on board as is usually the case with the larger passenger vessels. He must keep a clinical record of cases to present to the quarantine officer at the port of arrival.

(c). Port of Arrival. The Principal part of quarantine work is performed near the various seacoast or river ports where are located our quarantine stations.

Let us look briefly at the usual equipment of these stations. First is the water craft, steamer, launch or row boat, according to the weather conditions and the amount of work at the station, which is used to carry the quarantine (or boarding) officer alongside the incoming vessel. On shore the quarantine plant will vary in extent of equipment with many conditions, principally the amount of work and the number of people detained or are likely to be detained. The more necessary things are a force of skilled officers and employees, an executive building, a hospital, detention barracks, quarters for the station force, steam and sulphur disinfecting apparatus and material, a laboratory and such other conveniences as may be needed.

A vessel subject to quarantine inspection comes to the anchorage at the station flying a yellow flag at the foremast head, in other words, it is in quarantine until released. Immediately after the ship arrives the quarantine officer goes aboard.

The extent of the inspection will depend largely on conditions in ports where the vessel has been and on suspicious events en route. The examination is directed to the people, the cargo, the vessel itself and such biological carriers of disease as rats and mosquitoes. The bill of health and other papers are closely examined and inquiry is made as to any matters affecting the health status of the ship. All persons are seen and appropriate examination is made of any sick or suspects, the crew and steerage passengers being mustered on deck. The number of people found is checked with that of the crew and passenger lists and bill of health. Such inspection is made of rooms and holds as is suggested by conditions. A signed statement is obtained from the captain covering the sanitary history and condition of the vessel. In case no treatment other than the inspection is required a certificate of discharge from quarantine is given the captain.

What treatment the ship will need for infection or suspected infection with quarantinable disease of course will differ with the disease and the extent of the infection. As a rule those having, or suspected of being infected with, one of these diseases is removed to the quarantine station and appropriately isolated. A few words may be said as to each quarantinable disease.

First, Cholera. Persons exposed are detained 5 days from last exposure.

Parts of the vessel, food and water supply and cargo suspected of infection are disinfected or destroyed. The amount of the treatment will depend on the character of the infection and whether or not there have been cases on board. After completion of disinfection the vessel may be released, cases of the disease and suspected persons being left at the quarantine station. Special care is taken of the cholera case in quarantine that all excreta are thoroughly disinfected and that infection is not disseminated by flies and in other ways. Bacteriological examination is made of stools of all persons with diarrhoea and even of other persons in some instances to find any cholera bacillus carrier.

Second, Yellow Fever. The vessel is fumigated throughout, holds and rooms, simultaneously by burning sulphur 2 pounds to 1000 cubic feet of space for not less than 2 hours. The ship may then be released. The case is isolated at the quarantine station in a screened room to prevent access of the yellow fever mosquito, Aedes calopus. Exposed persons are detained 6 days from last exposure.

The sanitary treatment of this disease is very simple now as compared with the time before it was determined to be mosquito-borne. Then, not knowing where the infection was, everything around about was treated with sulphur dioxide, disinfecting solutions or steam or a combination of these methods. Even rock ballast was often dipped laboriously in bichloride of mercury solution. Now we fight the yellow fever mosquito only, and if none is present we know that there is no danger of transmission of the disease.

Third, Smallpox. This disease is so widespread over the United States, though without any great amount of it anywhere, and our present sanitary treatment so long practiced that but few words need be said. All exposed persons if not recently successfully vaccinated are so protected. Exposed rooms and effects are disinfected with formaldehyde gas, disinfecting solutions or steam and the vessel is discharged from quarantine leaving the case and certain exposed persons at the quarantine station. Detained persons are kept 14 days unless they have smallpox, which calls for further time, or vaccinia reaches its height which may shorten the time.

In passing it is well to remind ourselves to use good vaccine. It should be a reliable brand that has not lost its potency by age or heat. Vaccine deteriorates rapidly in warm weather and should be kept in the refrigerator. When people have been exposed to smallpox we should not trifle with impotent vaccine.

Fourth, Typhus Fever. Recent investigation by Anderson, Goldberger and others show that this disease is transmitted by the body louse, Pediculus vestimenti. Hence, our treatment is directed against this parasite. Rooms suspected of infection by parasites are fumigated with sulphur dioxide and treated with insecticide solutions. As this louse breeds in clothing, baggage, bedding, etc., are treated with steam, boiling water or insecticide solutions.

Fifth, Leprosy. The leper and baggage are to be removed to the quarantine station. The vacated room is disinfected with formaldehyde gas, solutions if necessary. Alien lepers are not admitted as immigrants.

Sixth, Plague. Simultaneous fumigation of the ship is done by burning sulphur 2 to 4 pounds to 1000 cubic feet of space for 6 to 12 hours of exposure, larger amounts being necessary

where there is cargo. Where it is impracticable to fumigate the holds on account of damage to cargo, or for other reasons, some, or all, of the cargo may have to be removed under precautions to prevent the escape of rats. This treatment is to kill rats and their associated fleas. Fumigation by means of the products of combustion of coal yielding a mixture of carbon dioxide and carbon monoxide, nitrogen and a diminished amount of oxygen, forced into vessels through pipes may be used to kill rats but is not so efficient against their fleas. After complete deratization of the ship it may leave quarantine, leaving the plague case and suspected persons at the station.

Plague is usually transmitted from place to place by means of the rat, it being primarily a disease of that animal. People catch it principally from contact with infected rats and their infected fleas. As the rat prefers traveling by ship to most other means of transportation, so plague is generally ship-borne from port to port and from town to town. Note how it has traveled along the western coast of North and South America.

In addition to the protection of the United States by treatment of ships for quarantinable disease we have in the medical examination of immigrants a further safeguard against other diseases and conditions that make for ill health and inefficiency. Here cases of communicable and mental disease and conditions that would make people become public charges are certified to the immigration official. During the fiscal year 1912 the following cases from certain diseases were certified in the whole United States: Trachoma, 1906; tuberculosis, 122; insanity, 57; syphilis, 118; gonorrhoea, 222.

In conclusion, it is well to remind ourselves of a few things: First, we have had all, and still have, some of these six quarantinable diseases here in the States. Cholera and yellow fever, while they made severe visitations in years past, are not with us now. Plague, we are about to be rid of on the Pacific coast. Smallpox, typhus fever and leprosy are endemic. Typhus fever, often in a mild form, is being reported from our large cities. In New York city for years it was known as Brill's disease. Leprosy was present (reported) in 16 states to the number of 146 cases January 1, 1912. To protect ourselves against quarantinable diseases we must not only prevent their entrance at our ports but fight what we already have.

Second, we may obviate the danger of epidemic from quarantinable diseases by putting our house in order, cleaning off our doorstep, cellar and backyard if you please.

Cholera spreads easily by flies, "Swat the fly." Destroy their breeding places and protect food from them.

Yellow fever is disseminated only by the yellow fever mosquito. No Aedes calopus, no yellow fever.

No unvaccinated people, no smallpox.

No "graybacks," no typhus fever.

Report our cases of leprosy to the health authorities so that proper sanitary treatment may be administered.

We must quit associating with the rat. Rat-proof our dwellings, warehouses and wharves. Clean out the backyard junk. Quit feeding the rascal and kill him when we can.

By taking precautions against outbreaks of quarantinable disease we fortify ourselves against other diseases, especially those that may be insect-borne, as tuberculosis, typhoid fever, enteritis, etc., and, in addition, make our home and country more cleanly, more valuable and more beautiful.

WORK OF THE LABORATORY OF THE STATE BOARD OF HEALTH.*

By F. A. Coward, M. D., Columbia, S. C., Director of Laboratories.

The laboratory of the State Board of Health was opened July 1st, 1909, by an order of the Executive Committee of the State Board of Health, which Board, as you are all aware, consists simply of the S. C. Medical Association. Authority for equipping and opening the laboratory was derived through the terms of the appropriation bill for the year 1909, which terms have been continued through the appropriation bills for the succeeding years up to and including 1913.

A sum of money is appropriated which is to be expended for the suppression of infectious diseases. Such being the case, no work other than that directly aimed at the suppression of infectious or communicable disease can be legally taken up in the laboratory.

The Executive Committee, therefore, outlines the scope of the work and is responsible to your body for its proper performance. The director of the laboratory is reponsible to the Executive Committee for the immediate conduct of the laboratory and the proper performance by himself and his assistants of the work assigned to them.

ORGANIZATION.

The working force of the laboratory consists at present of a director and an assistant. Four microscopists are also attached to the laboratory force. Two-fifths of the assistant's salary is paid by the Rockefeller Hookworm Commission, which commission also pays the entire salary of the four microscopists. The director is a physician, whose entire salary is paid by the State. The assistants in the laboratory are not medical men, but are more or less proficient in microscopic work, the assistant being fully competent to carry on the work in case of absence of the director. A colored porter who shares his time with the other department of the offices in Columbia, is also attached to the laboratory. In addition to assisting with animal experiments, he looks after the test animals and acts as mailing clerk. Specifically enumerated, the work done by the laboratory is as follows:

Routine examination of sputum for tubercle bacillus, or for other pathogenic organisms when requested.

Examinations of smears and swabs for the diphtheria bacillus or other organisms, by culture or otherwise.

Examinations of blood for the Widal test, for malaria, and for blood infections.

Examinations of feces for any designated intestinal parasites.

Examinations of animals for evidence of rabies, either microscopically or by inoculation.

Occasional miscellaneous examinations are made by special request, when such request seems reasonable and likely to lead to information or to give aid concerning the suppression of infectious disease.

It cannot be too strongly stated, nor too often repeated, that the only excuse for our laboratory lies in the suppression or control of infectious disease. This point is often overlooked by physicians who merely seek aid in the diagnosis of their patients' complaints as an aid in treatment. The latter is the function of private laboratories. We must bear in mind that the physician deals with sick people, but the Board of Health confines its attention to the well. The moment that a person becomes sick he belongs to the physician, the Board of Health then has no concern with him except to keep the

*Read in the Symposium on Hygiene and Preventive Medicine before the South Carolina Medical Association at Rock Hill, S. C., April 16, 1913.

well from acquiring his disease by contact or exposure to his infectious excretions.

So seldom do physicians realize these facts that it is only in rare cases that they report the existence of infectious disease in their practice to the State Health Officer, even though the laboratory findings indicate that the disease is one which is legally reportable. We have repeatedly made microscopic diagnoses of diphtheria, cerebro-spinal meningitis, and typhoid fever; and yet no report from the physician attending these cases ever reached the State Health Officer. Thus the main object of the laboratory is defeated. Physicians are also lax in giving information concerning specimens sent to the laboratory. The name, age, etc., and at least an outline of the clinical condition should always be sent, would be of great value to the laboratory workers, would promote accuracy in results, and would do much to promote a better understanding between the practitioner and the laboratory men. The microscope, like many other things in life, must be handled with common sense as well as technical skill. The oldest and most experienced laboratory men are very wary of reporting results of uncontrolled work, particularly in the absence of clinical information. In other words, it is the man who knows most about laboratory work who is most keenly aware of its fallibility and of the necessity for correct interpretation in co-ordinating apparently inconsistent results.

In addition to the tests enumerated, the laboratory prepares and supplies anti-rabies virus and typhoid bacterin, both of which are sent out only from the laboratory in Columbia, and only on request of physicians. Here again we have been unfortunate in not getting proper reports from physicians as to the results and complications attending the use of our products.

The work has shown a steady increase since its inception in 1909. Last year over one-half of all physicians in the State sent specimens to the laboratory. We made over five thousand examinations, treated 150 people in the Pasteur department, and manufactured and sent out approximately ten thousand ampoules of typhoid prophylactic, the work showing an increase of 40 per cent. over that of the previous year. We expect an equal or greater increase for the coming year. Comparison of reports from other States shows that we are conducting one of the largest State laboratories of the kind in this country.

NEEDED EXTENSION OF THE WORK.

Many things that we should do are as yet left undone—for various reasons—expense being always the bugbear, of course. We would like to furnish our virus and bacterin in syringes; we would like to furnish all physicians proper sampling and mailing outfits for specimens. We would like to send all reports by telegraph at State expense, and we would like to have branch laboratories; *not in the towns*, which should maintain their own laboratories; but in selected rural districts. Some of these improvements we can promise for the near future, others can only come by a process of evolution. Meantime I feel safe in asking on the part of the Executive Committee your criticisms, suggestions and co-operation in improving the laboratory.

Being more or less isolated in our offices, we work largely in the dark, as to some of the best methods for accomplishing our aim, which is to help the practitioner suppress infectious disease. The laboratory is yours, not ours, and will be what you make it—neither water nor education can rise above its source, and while the director appreciates keenly the free rein which he has

been given by this Association and its Executive Committee in building up a going concern in Columbia, he feels that the laboratory has now come to be the biggest part of the State Health Department, and he asks your aid in making it an object of pride to us all, promising that the mistakes of the past shall be the guide posts of the future, and that sincerity on your part will be met with sincerity and earnestness on his.

SCHOOL SANITATION.*

By L. Rosa H. Gantt, M. D., Spartanburg, S. C.

School sanitation is as much a product of modern times as are electric lights, telephones, wireless telegraphy, and the automobile—it is the result of the public school system and is made necessary by the condition of modern civilization. It would have been impossible to apply it to conditions existing in the log school house in which was begun the education of some of the oldest members of this body. The rural school period extended only between the time of working and the time of gathering the crops; the unchinked spaces between the logs and the unglazed open windows gave ventilation and light to the pupils, the seats were pine slabs and no artificial heat was needed. Living close to nature, among forest trees in fresh pure air, near springs of fresh water, the child of the past grew to manhood in spite of the hard benches, under the unspared rod and stern discipline of the school master. The finished product of the old method was for the most part an anemic, stoop-shouldered, undeveloped specimen of manhood or womanhood, learned in the arts and sciences but often physical and nervous wrecks, unsuited for the stern battle of living, this was so true that even at the present day we associate great learning with defective physical development. It is a wrong system of education that ignores the bodily well being of the pupil and is willing to sacrifice physical upon the altar of mental growth. The problem of human life and development is such a complex one that it is impossible to say just how far wrong educational methods, defective school sanitation and the lack of hygienic teaching are responsible for the development of the stoop-shouldered, narrow-chested, near-sighted, nervous, anemic type of scholar. He is however the product of the educational system of the past, and it matters not how deep his learning, how high his moral training, nor how lofty his ideals, from a physical standpoint he brands that system as defective in that it failed to pay the proper regard to the physical growth of the child placed in its custody. The objects of school sanitation and hygiene should be to correct the errors of the old system. Longer school periods, more congested population and present day civilization make imperative a scientific study of sanitation in connection with the schools of the country. About one-fifth of the entire population is under instruction in the schools at a period of life when good health and its preservation are matters of the highest importance. In the limited time given me I can not hope to do more than outline a few general principles governing sanitation in our public schools.

The location should be well back from the road or street in a neighborhood free from noxious and offensive surroundings or noise and should not be near a railroad. The site should be capable of thorough drainage, it should also have a supply of good fresh drinking water. The school building should

*Read in the Symposium on Hygiene and Preventive Medicine before the South Carolina Medical Association at Rock Hill, S. C., April 16, 1913.

be planned by an expert with due regard for the needs and for the accommodation of the normal school attendance. A minimum of 15 square feet of floor space for each pupil should be insisted upon. Under the school law of South Carolina, all schools and colleges are required to provide proper methods of ventilation, sufficient to furnish each pupil 3,000 cubic feet of fresh air per hour. The light should, so far as possible, be admitted through a window so that it will come from the left of the scholars, all other windows should be for ventilation only, and should extend as near to the ceiling as possible and should be at least four feet above the floor.

The modern school house has done away with the seats and benches and supplanted them with tables and chairs, with due regard to the proper proportion maintained between table, chair and child; the height of the table should be such that would permit the child to place both forearms on the table without raising or lowering his shoulders.

The question of heating is a vital one; for years past a rusty stove placed in the center of the room in a box of dirty sand which was used as a spittoon and waste basket gave uneven heat to the pupils, those nearest the stove would roast while those far away froze; to make the room warm as possible the doors and windows were kept closed, preventing ventilation from maintaining an even temperature. The lack of proper ventilation and heating is a sanitary crime, even in the schools of the present time, colds, influenza, pneumonia, and tuberculosis are spread by such conditions. In the country schools, hot air, steam and hot water are impractical but a supply of fresh air may be introduced into the room by means of a well regulated, jacketed stove, with inlet and outlet to provide for ventilation; a temperature of 65-68 degrees should be maintained during school hours, provision should be made for moisture, to supply the loss involved in heating the air to a sufficient degree to insure comfort.

The privy in every rural school should be of the type designed by Drs. Lumsden and Stiles and should be at least forty feet from the school house, such as are required by the health laws of South Carolina.

"The old oaken bucket" should be relegated to the realms of poetry and fiction and should be supplanted by a driven well with pump and cement cover. In towns and cities the water should be drawn from the city water works and supplied to the pupils through sanitary drinking fountains.

All doors and windows should be provided with screens of 12 mesh wire. The walls should be of some light-reflecting color, yet restful to the eye, preferably a light, greenish-gray, nearly white.

So much for sanitation of school buildings and grounds, but just as a man's house does not constitute his home, the school house does not constitute the school and while rules of construction are sanitary necessities the best school sanitation is after all, the high ideals, beneficial rules, exercised and taught to the growing child that he may know and carry to coming generations knowledge that will benefit others that come after him. We know that the common drinking cup is a means of carrying diphtheria, tuberculosis, etc., why not have the schools teach this fact by banishing the common drinking cup from the school rooms, thus impressing upon the minds of the children the transmissibility of disease by contact, abolish the common pencil box, teach the children to keep their fingers out of their mouths, not to bite each others' candy or fruit, not

to use each others' gum or whistles and to put nothing in their mouths save food and drink. They should be taught not to eat fruit that is not peeled, washed, nor cooked, not to eat without washing the hands and not to eat food that has been exposed to flies. Teach them to keep their hands, faces and nails clean, to observe oral cleanliness and teach them habits of personal hygiene and to avoid the habits that spread the contagious diseases among the pupils of our public schools. The value of fresh air, the need of ventilation in sleeping apartments, the prime importance of healthful exercise to ward off disease and promote healthy, vigorous growth should be impressed upon the children. The teaching of the value of clean habits, the part played by insects in the transmission of disease, the effects of dissipation and the methods of contagion of the preventable diseases are well within the province of the school teacher. In the public school system there is still too much rigidity, too many stiff, hard seats, too much fatigue, too many exercises to be prepared after school hours, too much a continual grind of mental work without proper relaxation in systematic physical exercise for the growing child. There is not enough variation in the monotony of teaching by precept, not enough nature study, not enough manual training, not enough practical demonstrations on the subjects taught, and in time many pupils, instead of associating the useful activities of school life with feelings of pleasure come to regard them as irksome, then comes a faulty adjustment between the mind of the pupil and his situation, resulting in nervousness, dissatisfaction, inattention, and often truancy. In the primary grades, the sense of touch, which is known to be the best developed faculty in infancy, should be utilized more and the eyes should be spared as far as possible. Lessons should be taught in the "play attitude" without stress on the child and without exacting active attention or other fatigue producing activities. Children learn the every day things of life that are within their experience, such as tying knots, lacing and buttoning shoes and clasping locks, they can learn to know circles and squares first by the feel, to arrange in order and to do an hundred things educational in their nature. The school of Dr. Maria Montessori in Italy, established upon this principle, more in keeping with the true laws of proper physical development of childhood is attracting the attention of the civilized world. It is necessary that every teacher in the public schools should have some general knowledge of the hygiene of the eye and ear and that they understand the operation of these organs. My observations have shown me that a child with defective vision or hearing may sit for several terms of school life under the daily tutorage of the average teacher and the defects remain unnoticed and the unfortunate child becomes branded a dullard. It is easy enough to determine whether a child can see, hear and breathe normally and yet throughout the schools of South Carolina today the teachers fail to note defects in these particulars so vital to the health and learning capacity of their pupils. Every teacher should possess sufficient general knowledge of hygiene to detect the nature of defects retarding the pupil's progress. She should be familiar in a general way at least with the symptoms, causes and consequences of the so-called school diseases and should know what preventive measures must be taken to prevent the outbreak and spread of epidemics and infectious diseases. She should have the ability to handle the more ordinary types of accidents such

as nose bleed, fainting, etc., and should have a "first aid to the injured" knowledge of the more serious accidents in order to care for them until the physician arrives. Above all however a possession of a general knowledge of the growth and development of children is essential that in the zeal to improve the child mentally she does not physically overtax him.

Professor Swift has said that "half an hour's observation of pupils at their school work will convince one skilled in interpreting nerve signs that nervous disorders have become so common as to menace our national health and the significance from this from an educational standpoint has been too generally ignored." It is needless to say that the laws of sanitation and hygiene in a sanitary school house can never be taught or enforced save by a thoroughly hygienic and healthy teacher. The teacher's profession is one which demands definite hours, consecutive days, exposure to weather, physical strain and high nervous tension. The school room is no place for a nervous wreck, a victim of tuberculosis or one suffering from any communicable disease or physically incapable of measuring up to the duties of the teacher's position. More attention should be given to the comfort of the teachers in the arrangement of our school houses. Enthusiasm, reserve force and quiet nerves are essential assets to every successful teacher. Prolonged periods of class room work produce fatigue toxemia with its inevitable physical lassitude and nervous irritability. The health of both pupil and teacher demands sufficient intervals of relaxation to allow for the elimination of the fatigue toxins. In conclusion I can but impress the fact that the question of school sanitation is so thoroughly technical, scientific and medical in all its phases that the co-operation of the pedagogue and the physician is imperative. Sanitation is and should be the special study of those who devote their lives to the preservation of health—the physician. The work of the teacher is distinctively that of child training and while we may be able to lay down general rules and directions for their guidance in the preservation, protection and training of the children in the schools of the State, in their practical application the problems presented are too complex for those not specially trained in sanitary and medical affairs. I can only reiterate what I have said before this body on a previous occasion, that there will be no real progress in school sanitation in South Carolina until the sciences of pedagogy and medicine are linked by the passage of a law providing for the medical inspection of our school children.

HOME SANITATION.*

By Dr. Wm. Egleston, Hartsville, S. C.

It has been no easy matter to prepare a paper on Home Sanitation. It is bound up so closely with Personal Hygiene on the one hand and with Municipal Sanitation on the other that very little is left which deals with the home exclusively. However it is certain that any system of sanitation, and particularly all municipal sanitation, must be built very largely upon the individual home and its condition. Also that system of sanitation which is the most successful is the one which engages the earnest co-operation and assistance of the individual householder.

In dealing with this subject one must take up first the house itself, and our first consideration is:

Sanitary Construction: Sanitary construction involves much which is

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*Read in the Symposium on Hygiene and Preventive Medicine before the South Carolina Medical Association at Rock Hill, S. C., April 16, 1913.

purely technical and which in a paper of this kind we may pass over. It has been suggested that the physician might set an excellent example of sanity and of comfort in house construction in the shape of his own dwelling. In our own climate wood seems the material in commonest use for construction, though brick is fast growing in favor and the brick-veneered structure has many points which commend it to favor—chief of which is the large air space between outside and inside wall. Our Southern houses differ in one particular from those of the North, I am told, by making no provision as a rule to exclude rats and mice and the common house vermin. This is said to be easy of accomplishment and inexpensive. Considering the damage done by these pests, not to mention the probability of the future disclosing their activity in disseminating the common communicable diseases as well as Bubonic plague, this is a matter which merits attention. Within the house the weight of authority is for hard plastered walls and ceilings painted or calcimined (never papered) as most easily cleaned and sanitary. Also it is recommended from a sanitary standpoint that the floors be of hardwood uncovered except with easily removable rugs. The roof of a house has much to do with its comfort and some insist with its healthfulness. Authorities recommend the old shingle roof as best meeting requirements from both angles. It need hardly be pointed out that a house of this construction indoors is susceptible of renovation or disinfection with the best of all germ destroyers—paint or calcimine.

House Furnishings: There seems to be a tendency among persons of good taste towards simplicity in house furnishings. Iron bedsteads, rugs, few draperies and sanitary furniture seem to be the rule now. Blair, in his Public Hygiene, to which work I am largely indebted, is of the opinion that we are rapidly learning from the Japanese and other orientals the beauty of simplicity. This he feels sure contributes both to the sanitary conditions, and to the comfort and health of the housekeepers in giving less cause for drudgery and more time for rest and recreation. He deprecates the common habit of spring and fall house cleaning, and predicts its rapid disappearance with the advent of bare floors and walls, simple furniture and the vacuum cleaning apparatus—all tending to maintain a house of constant clean and presentable appearance.

Grounds Surrounding the House: All houses should be located with a view to good drainage, and especially rapid drainage for storm water. The gutters should be especially looked after, for choked down-spouts as well as sagged gutters have been found in my experience to be a common source of mosquito breeding. The rain barrel should not be allowed, for it is certain to be neglected and to become the breeding place for mosquitoes of all sorts—the anopholes not excepted. For the same reason cellars should be carefully protected from water collection, and since they harbor the mosquito summer and winter, should be thoroughly fumigated to destroy them twice or more a year. In the matter of vegetation there should be a limit to the number of the shade trees and their proximity to the house, as tending to interfere with the sunshine. Vines and all heavy dense vegetation are to be discouraged as unsanitary and offering shelter for mosquitoes and other insects. Front yards and lawns are generally kept clean and sanitary for reasons of pride or expediency. The back yard should be bare and kept clean of all cans and bottles and other water-holding, mosquito-breeding containers.

It has been suggested that for scraps which escape the garbage can and for the destruction of other odds and ends a land turtle is a fine scavenger. It is in my experience a difficult thing to arouse much pride in the back yard and it is made a matter of rigid rule and inspection in my own town.

Domestic Animals: Most of our towns and cities have banished the hog from their limits. In the matter of domestic animals, appurtenances of the farm and the country home which have grown into our town and city life, it can only be said that no attempt should be made to keep them except where ample space is available. Furnishing the material for fly breeding, provision must be made for the weekly collection of all manure, and its safeguarding against fly propagation in fly-proof containers. Laws bearing on this sanitary necessity and *vigorously enforced* will entail so constant a burden and so large a cost that it will generally result in the giving up of the cow in towns and cities as too expensive a luxury—and occasionally also the horse for like reason. Indeed the horse seems likely to become less and less a municipal problem as the automobile supplants him for both pleasure and business. Cats are said to carry contagion at times and doubtless do. They are poor pets and useless in rat-proof houses. Dogs are a constant source of danger from rabies and I hope to see the time when they can be kept, in our towns and cities at least, only under the requirement of muzzling the year round. It is only to mention the family cow to suggest the opportunities for tubercular infection in a family, and to remind us that the best and purest milk is not to be found on the farm or at the old home, but in cities such as Washington and New York where it is offered for sale under stringent rules insuring its purity and its wholesomeness.

Heat and Ventilation: The open fireplace gives us the maximum amount of ventilation with the minimum amount of heat for the fuel consumed. Ideal then as a ventilating arrangement and indispensable as an accessory heat for our variable Southern climate, it should be in every room of our homes. Tighter construction of our houses would also increase its heat efficiency markedly. Heating stoves which have largely superseded the fireplace give the maximum amount of heat with the minimum amount of ventilation. The ordinary trash burner is excellent for quick heat but undesirable for steady heating in the home. The hot air furnace is a compromise between the two and when properly constructed and run is a very desirable method of heating for the average home. Hot water and steam heating are becoming more common in our houses. Hot water heating is open to the grave objection of slowness. Steam heating is open to the equally grave objection of being incapable of regulation except to a minor degree. Both are open to the still graver objection of making the matter of ventilation in connection with all heating by radiation a very difficult one. Interesting papers have been written on this subject and the important part which humidity plays in the matter of heat and ventilation in relation to comfort. Attention is called to the fact that the registered temperature of a room with radiator heat will oftentimes not supply the sense of comfort to be expected. This is found to be due to the low relative humidity within the room. The average humidity within doors in New York city has been placed at about thirty per cent. as against seventy per cent. out doors. Such a striking contrast it is reasonably pointed out must be a violent strain on the upper air passages and is held to account for much of the pneumonia and

allied troubles of the winter season. In the old days of open fireplaces frost on the window panes in winter was the usual sight. In this day of heating by direct radiation it is not seen—a sufficient evidence of the indoor dryness. I believe that in this State a common mistake is made of regarding our climate as largely a summer or warm one. Our houses have evidently been constructed in the past on this theory. It will be found that quite seven months require heat in our rooms, at least for some part of the day, and for the children's rooms especially. Much comfort would be secured and doubtless much sickness would be avoided if we built our homes with a better regard for the trying winter months, and provided them not alone with sufficient open fireplaces but with a general heating system for the real winter.

Water Supply: Municipal water supplies in this State guarantee to the consumer a constant pure and palatable water. In homes not so fortunately supplied it can only be urged that the water used be submitted to the State chemist at regular intervals for examination. It goes without saying, of course, that artesian water is preferable where obtainable, and that driven wells are to be desired from a sanitary standpoint as being less liable to surface contamination. A very reassuring indication is the general interest manifested in the purity of drinking water on the part of the average citizen. It probably is the one sanitary matter which arouses widespread interest.

Sewerage: Municipal sewerage works make a simple matter of this problem for the home fortunate enough to possess connection therewith. It should be required in every town and city that residences within two hundred feet of a sewer be connected thereto. Not only for the home itself but for the equally important servants arrangements. It is probable that the importance of sewer gas as a causative factor of sickness within the home has been over emphasized, but it is far from certain that this is so and our State should have certain plumbing regulations strictly enforced. When septic disposal systems are used in connection with the home arrangements two things are absolutely requisite: First, that they be installed under expert direction, and second, that they be maintained at the highest state of efficiency. Where conditions compel the use of the privy there can be no improvement made on the fly-proof sanitary construction so well illustrated in all pamphlets dealing with the hookworm and with rural sanitation. For the collection of both the solid and liquid excreta nothing will surpass the large galvanized coal scuttle placed on a platform closely under each seat. For excreta from the sick room there should be made special arrangements for collection, disinfection, screening and disposal. The custom of burying the excreta on the premises is pernicious in the extreme and certain to give trouble. It should be hauled off to a distance and plowed under or disposed of under sanitary conditions.

Screening: An excellent indication of the widespread interest in things sanitary and hygienic is illustrated in the almost universal custom of house screening. Besides being a most excellent precaution against disease, fly-borne and mosquito-borne, it ministers in a wonderful way to the comfort of the home. The kitchen should be especially well screened and in this connection I would suggest the additional safeguarding of this part of the house by screening the back porch on which the kitchen usually opens. The ordinary galvanized wire will last about ten years under average wear and tear. The common mistake is made of using

too coarse a mesh, and thus admitting small insects as well as young mosquitoes and flies. The State law requires 12 mesh for school screens—a 16 mesh is better.

The Sleeping Porch: The sleeping porch is a part of the modern home and is being constantly added to the older homes. Its provision should be encouraged by the profession as furnishing excellent adjunct treatment for many ills other than those of a tubercular character. It should be well screened. A word might be said here about using the sleeping porch for the very young. A child too young to realize the sense of discomfort and to give immediate and intelligible expression of this discomfort should not be allowed to sleep on the porch or in the open.

Room for the Sick: In closing, I want to make a plea for accommodations in every home devoted to the care and comfort of the sick. With our increasing prosperity, and with our decreasing families a room can well be set aside for this purpose in most of our homes. A room to which every case of sickness can be immediately removed, contagious or not, where the obstetrical case, the typhoid fever case, the case of tonsilitis and every case of sickness can be taken out of the daily life and activities of the home and properly cared for. Every general practitioner will bear out the statement that a room of this sort will simplify the treatment of disease and multiply the chances of recovery. It can be oftener arranged for than is done and in that it removes the dangers of infection, and takes out of sight the many distressing features of all illnesses, for the rest of the family, it is a real blessing. In cases of communicable diseases it is a God-send to all concerned, and not the least attractive feature is that it makes the rules of qaurantine acceptable and enforceable by entailing a minimum of hardships and discomfort on those not ill.

THE RELATION OF DOMESTIC ANIMALS TO THE PUBLIC HEALTH.*

By Dr. G. McF. Mood, Charleston, S. C.

From a public health standpoint, domestic animals include animals of any kind with which the human race more or less constantly come into contact, and with which they are more or less intimately associated. The most important are:

1. Dogs and cats.
2. Horses and mules.
3. Cows and sheep.
4. Rats, mice and other rodents.
5. Hogs.
6. Chickens.
7. Various wild animals in captivity.

While it has been recognized for years that these various animals suffer from diseases, often in epidemic form, most of which diseases always remained confined to them, never spreading to the human race; such diseases as hog cholera, swine plague, chicken cholera, etc., within recent years the fact has gradually been borne in upon us that these very animals at times not only do suffer from diseases similar to human diseases, but further, that they may act in various instances in spreading such diseases to the human family, either directly by contact, or through the medium of biting insects; and still further, that through insects attracted by them, strictly human diseases may be spread. It is to this relation especially that I wish to briefly call attention.

Of the domestic animals, those which are the closest companions of man are the cat and dog; I think it would scarcely be an exaggeration to state

*Read in the Symposium on Hygiene and Preventive Medicine before the South Carolina Medical Association at Rock Hill, S. C., April 16, 1913.

that the number of these animals in any community would about equal the number of human beings. These animals are looked upon as harmless, and fortunate it is for us that most often they are so. Both of these animals suffer, however, naturally from hydrophobia, and are capable of transferring the disease to man by biting, or by the entrance of the saliva into an open wound. On account of a natural resistance, protection from clothing, etc., the disease develops in only 16 per cent. of untreated, infected human beings, but this 16 per cent. represents an equivalent mortality, for the disease is as constantly fatal in man as in the lower animals. It is said that in Australia the disease never occurs, owing to rigid quarantine regulations governing the importation of dogs.

The Taenia Canina, a short tapeworm, is occasionally found in man, infection occurring from contact with dogs and cats harboring the parasite. Again, Taenia Echinococcus, for which the dog is a host, is found not infrequently in man, the disease occurring in the viscera, and especially in the liver of man, three-fifths of the cases occurring in this organ as hydatid cysts. Man and sheep are the intermediate hosts, infection taking place from eating food contaminated with dejecta containing ova. Horses and mules suffer from glanders, which disease is readily transferable to man. Those affected are most often hostlers and drovers, infection in these occurring most frequently, from the entrance of the nasal discharge of the animal into an open wound, producing primarily a local lesion, from which a general infection may rapidly result; or it may, as in the horse, run a chronic course. In man the mortality is 60 per cent.

Tetanus exists principally, owing to the almost constant presence of the bacillus in the intestinal tracts of herbivorous animals, the organisms forming spores shortly after being voided with the feces and in this form are constantly found in the manure of these animals, and in soil enriched with it. It is from contact with this enriched soil that human cases most often develop; through punctured or lacerated wounds contaminated with it.

Cows and sheep are responsible for the occurrence of a number of diseases in man, the most frequent probably being anthrax. While this disease is not uncommon in various sections of our own country it has never here become the scourge which it has been for many years in France, Russia and especially Siberia, in which latter country it is known as Siberian Pest on account of its constant ravages. Many cases develop in countries distant from these, most often in those whose occupations compel them to handle, and breathe in the dust from, wool of diseased animals.

The cow is the intermediate host of the Taenia Saginata, or beef tapeworm, the organism imbedding itself in the muscles of the beef, which is spoken of as "measly beef;" man acquiring the disease by eating this measly beef when insufficiently cooked. Being the true host of this parasite, the mature tapeworm is found in his intestinal tract after such infection.

Probably the one disease transferable by the cow, of greatest interest to us, is tuberculosis. At the International Congress on Tuberculosis, held in London in 1901, Koch expressed the opinion that bovine tuberculosis is not communicable to man. Ravenel and many others opposed this view, and cited cases in support of their contention. The subject is not yet satisfactorily or definitely decided, but there is much evidence in support of the opinion, that while bovine tubercle bacilli rarely produce tuberculosis in the adult, it is

an organism to be reckoned with in the disease occurring in childhood—Park estimating that it enters as a causative factor in about 10 per cent. of the cases of this disease in children. The disease is communicated to children most often through the medium of milk and butter, though flies and dust, when diseased cows are in the immediate vicinity, must be considered as possible factors in its transmission. It is considered unnecessary that the cows udder be diseased—foci in any of the tissues, resulting in contamination of her milk.

Actinomycosis, or lumpy-jaw, is another disease of cattle, communicable to man, occurring through infection of an open wound, through the mouth or pharynx, and through the respiratory and digestive tracts. Fortunately the disease is uncommon in man.

Another disease, due to the eating of the flesh of the diseased animal, is what is spoken of as "true meat poisoning." This form of poisoning is due to Bacillus Enteretidis, and in every instance the animal is diseased at the time of slaughter. The disease occurs in cows as a true septicemia, characterized by a profuse diarrhoea, and is communicated to man through, not only fresh meat, but also dried meat, sausages, etc. Small epidemics of this disease are not at all rare during our warm monthss.

One of the most important animals from a public health standpoint, is the hog. Besides being a decided nuisance in thickly settled areas, it harbors parasites, and suffers from diseases which may likewise affect man. The most important of these is probably Trichiniasis, due to the eating of "measly pork" when not cooked at a temperature high enough to destroy the trichina spiralis, imbedded in the muscles. Man, the hog and the rat are the hosts of this parasite. Although we continue to see, from time to time, reports of cases of this disease, it is undoubtedly becoming more and more rare, owing to the proper inspection of pork at the time of slaughter in a large number of communities.

Again, the hog is the intermediate host of the Taenia Solium, or pork tapeworm, which organism, like the above, being present in the muscles of the pig, gain entrance to the human stomach, are passed on without injury to the intestines, where they mature to the adult worm which is so well known to all of us. This disease, like the above, depends for its eradication, upon efficient inspection of all pork at the time of slaughter.

Another disease, in the spread of which the dog has only recently been incriminated, is human Trypanosomiasis, or sleeping sickness of various tropical countries, and especially sections of Africa. For many years the link between the occurrences of cases among new arrivals, in areas uninhabited for years, has been wanting. This missing link has recently been supplied by the finding of the human parasite, not only in several wild animals, but—which is of great importance—in the native dog. This disease is of casual interest to us only, as it develops solely in tropical countries—being transferred by a tsetse fly, found only in the tropics. Such cases as we may chance to see will all be importations. One interest attaches to this disease, however, its many points of similarity to pellagra. Not by analogy alone may we reason that this disease, too, is a parasitic one, transferrable by some insect or insects, but a late report of Drs. Sambon and Chambers indicate most strongly the parasitic nature of this disease.

It is scarcely necessary for me to refer to the important, if not essential role, played by rats, in the importation, maintenance and spread of Bubonic Plague. The rat is extremely suscep-

tible to this disease suffering, not only from the acute rapidly fatal form, but often from a chronic form, in which the plague bacilli may remain dormant in its tissues for months. On account of the cannibalistic habits of the rat, and the rapid transfer of the disease to others by fleas, the disease rapidly spreads among these and other rodents. There have been reported epidemics of the disease among rats, months prior to the development of human cases in a community. The disease is spread to human beings by fleas, flies and other insects, and by contamination of food stuffs by diseased rats.

But one disease of birds is known positively to be communicable to man; Psittacosis, a peculiar disease of parrots, producing in man a very fatal form of pneumonia. This disease does not develop in parrots in our country, unless they be brought into contact with imported diseased birds, human cases here likewise resulting from contact with these.

Only within the past few months, a species of biting fly—the Stomoxys Calcitrans—has been definitely proven a carrier of the virus of acute anterior polyo-myelitis. While it is possible that the disease may be spread otherwise, it has been established beyond doubt that the disease can be spread through the bite of this fly.

There have been many reports, suggestive of domestic animals playing an important part in the occurrence of the disease—viz the occurrence in various places, just prior to outbreaks of the human disease, of a somewhat similar affection observed in dogs, cats, hogs and other small animals, characterized by paralysis of the hind quarters. Just what relation may exist between the two diseases is unknown, but when we recall the facts, that infantile paralysis occurs with greatest frequency, and in largest numbers in rural districts, where the stomoxys fly, a proven carrier of the disease, and these lower animals exist in larger numbers than in cities, a possible relation cannot be lightly put aside.

There is no intention, in this paper, of relegating to a place of secondary importance, the various truly human diseases, communicable by flies, pet animals, or through food products of domestic animals; for the writer realizes fully the importance of fly breeding in illy kept cow and horse lots and stables, and of insanitary methods of handling food products of animal origin. The intention has been, rather, to direct attention to that phase of this mutual association to which, I think, insufficient attention has been given in the past.

Public Health

Report of the State Board of Health.

By Robt. Wilson, Jr., Chairman, Charleston, S. C.

The President and Members of the House of Delegates:

The general health conditions prevailing in South Carolina have changed but little since our last report. At the present time smallpox, measles and German measles are the most widespread epidemic diseases, but all occur in mild form. During 1912 the State Health Officer investigated reports of smallpox in twenty localities, the chief centers being Anderson county, where 400 cases have been reported, and Richland county, in which there have been 150 cases.

Scarlet fever occurred in only four localities, and since January 1st no cases have been reported. Epidemic cerebro-spinal meningitis during 1912 made its appearance in Charleston, Spartanburg and Cherokee counties, but did not spread epidemically in either locality. In January of the pres-

ent year cases were again reported in Aiken, Chester, Calhoun, Marlboro, Newberry and York counties, but no cases have been heard of since March 1st. The State Health Officer was able to examine the fluid obtained by spinal puncture from twelve cases, of which seven showed the meningococcus, of Weichselbaum, and the pneumococcus, and four were doubtful. In the four doubtful cases the fluid was not examined until some time after withdrawal, so that very probably some degree of bacteriolysis had taken place. It is highly desirable that the fluid be smeared and stained as quickly as possible after it is drawn. Out of sixteen cases four received Flexners serum, all of whom recovered, while the twelve untreated cases died. The four cases which received the serum were positive for the meningococcus. It is interesting to note that the case of pneumococcic meningitis proved very rapidly fatal.

The State Board of Health has on hand a supply of serum and will be glad to distribute it when needed.

The work and usefulness of the laboratories of the State Board of Health continues to grow. In 1912, 5,640 examinations of blood and sputum were made; 149 heads of rabid animals were examined, and 245 patients treated; 11,552 ampules of typhoid bacterin were distributed; diphtheria antitoxin to the amount of $6,134.60 was distributed; 57,610 vaccine points were sent out.

The State Health Officer has been most active in carrying on the work and in extending the influence of the State Board of Health. Besides investigating and controlling epidemic diseases he has given lectures before the Civic Leagues of Spartanburg and Lake City, lectured on Public Health at Dillon, investigated the sanitary conditions at Allendale, investigated the drainage of land, Ridgeland, investigated the sewerage system of Ridgewood Park, investigated the sanitary conditions of Blackville, lectured to the public school children at Lexington, investigated the water supply of Florence, investigated the sanitary conditions of Clio, inspected Union Bleachery at Greenville, inspected the fish pond at Bishopville, inspected the jail at Sumter, addressed the Farmers' Institute at Bennettsville, lectured on sanitation at McColl, lectured on typhoid fever at Camden, investigated Taylor's pond at Summerville, investigated the sewerage disposal at Fairfax, investigated the sewerage system at Calhoun Falls, inspected certain sanitary conditions at Greenville, inspected the bottling works at St. Matthews, besides conferring with various boards of health and other official bodies.

It is gratifying to announce that for the first time South Carolina will be included in the morbidity reports of the U. S. Public Health Service, thus receiving recognition for greater efficiency in reporting contagious diseases. We earnestly hope that every one of you will do his utmost to make these reports more perfect still. The State Health Officer has sent to every member of the medical profession cards upon which are specified the reportable diseases, which are to be used to obtain statistics from the unincorporated districts. You are requested to fill out these cards and return them as soon as diagnosis is made. In accordance with the act of 1912, informing the State Board of Health to form rules and regulations to govern the sanitation of railway cars and public carriers, schools, jails, etc., rules and regulations have been promulgated already, applying to jails, railway coaches, school houses and infectious diseases, and others will be drawn up and promulgated with all possible dispatch.

Society Reports

CLARENDON COUNTY MEDICAL SOCIETY.

The March meeting of the Clarendon County Medical Association was held at Summerton in the office of Dr. Thos. Davis with a fairly good attendance.

After the reading of the minutes and the adoption of same the subject of gunshot wounds was discussed in detail and many interesting cases were mentioned. One case with abdominal complications mentioned by Dr. Stukes was especially interesting. Dr. Geiger also mentioned a case of stricture of the urethra in which the bladder was enormously distended, resulting in the tapping of the bladder and the removal of about two quarts of clear urine. The patient was later sent to the Roper Hospital in Charleston, where operation was made by the suprapubic route with good results.

Drs. Sep Jordan, of St. Paul, and T. R. Littlejohn, of Pinewood, were nominated and unanimously elected members of the Association.

The subject of the J. Marion Sims monument was then taken up and Dr. Todd was asked to write an article for the county paper asking the ladies to take part in this. The secretary was asked to write each member and ask them for a contribution to this undertaking.

The Association extended an invitation to Dr. Woods, of Florence, to be with us at the next meeting and read a paper on eye, ear, nose and throat complications.

After completing the business of the Association for this meeting the Summerton division of the Association served a most delightful salad course. This was enjoyed by all and it gave a more social atmosphere to the meeting.

W. SCOTT HARVIN, M. D., Sec.

DARLINGTON COUNTY MEDICAL SOCIETY.

The citizens of Hartsville on March 11th entertained the Darlington County Medical Society with a fish stew on the banks of Black Creek. The meeting was made doubly interesting on account of the novel entertainment furnished by the local doctors. There is little doubt that the combined social and scientific meeting is in the long run conducive to the best interest of the county medical society.

The officers of the Society are: T. E. Howle, Hartsville, Pres.; W. A. Carrigan, Society Hill, Sec.; J. W. Wilcox, Darlington, Treas.

The official report to the State Medical Association showed fourteen members in good and regular standing.

T. E. HOWLE, Reporter.

SPARTANBURG COUNTY MEDICAL SOCIETY.

The Spartanburg County Medical Society met with a fairly good attendance. Several interesting clinical cases, two of which had been treated with streptococcic serum were reported by Drs. Sparkman, Jefferies, Lindsay and Norman. In lieu of a paper, Dr. W. A. Smith read a letter sent in 1840 by a physician to a planter in Union county prescribing treatment for a slave woman on his plantation. The letter and treatment were very unique. Dr. Lancaster suggested that in prescribing the ready made pills and tablets of today we are no wiser than was the old physician with his duplication of remedies and drastic methods. A general discussion of the absurdity of using antiphlogistine in pneumonia was entered into and Dr. Jefferies stated that we need to go back and study on materia medica and suggested asking some one competent to do so to lecture to the Society on this branch of medicine. The delegates reported a very interesting meeting of the South Carolina Medical As-

sociation. Dr. James R. Sparkman was elected censor to succeed Dr. J. R. Brown, who has withdrawn from the Society.

L. Rosa H. Gantt, Sec.

Current Medical Literature

The Status of the Cancer Question.

In looking over the programme of the meeting of the Congress of American Physicians and Surgeons, one is struck by the fact that papers on carcinoma or malignant tumors appear in nearly every section. Besides, one of the societies present devoted its entire time to that subject. When any one topic appears for discussion from so many different aspects it generally indicates one of two conditions. Either it is new and relatively infrequent, or else it is old and widespread. In this instance the latter holds true, and there is added the fact that as yet comparatively little has been done in the way of combating the condition. Consequently, the energies of hundreds of men are being expended in attempts to find the cause and to effect a cure whatever that cause may be.

What has been accomplished along either of these lines? Are we any nearer an understanding of the problem now than fifty years ago? It would seem that we are. The work of many indicates that there is what might be termed a precancerous condition, one that can be experimentally produced. To this, as one more link in the chain, can be added the evidence that chronic irritation is in many cases essential. Very recently Ryall has pointed out the frequency of cancer of the tongue in those who have had syphilis, over eighty per cent. giving a specific history. Example after example has been added to the list of chronic irritative changes that precede the development of malignant disease. It will therefore be noted that at the above mentioned meeting much has been said concerning prophylaxis, and those toward whom this was mainly directed are the women, particularly those who have borne children. Many papers were also read the theme of which was the treatment and cure of cancer, and here comes up the question of diagnosis. Unfortunately, there has as yet appeared no method other than microscopical examination that has been of any assistance. Immune reactions with serum have been attempted, but have proved of no use. The blood has been examined for the presence or absence of many substances, but unsuccessfully. At present there is no way of telling what it is that one is dealing with. Although no means of early diagnosis other than the microscope is known, the outlook for the sufferer is not the gloomy one that so often obtrudes. Many cases of cancer can and have been cured. All sorts of schemes have been attempted, everything from a poultice of crushed violets to surgical interference, but it is the latter alone that promises anything. Even if the cause has not been found we must not feel that the outlook is hopeless. It may be that all kinds of parasites have been blamed, but what interests the patient is the method that will cure. Consequently, while the laboratory worker is busy with his research, the man in the fighting line must be constantly exerting himself to get his cases earlier, which means at a time when complete removal is possible. There seems little doubt that cancer is primarily a local condition and as such can be handled readily. To wait, however, means to court disaster.—Editorial *N. Y. Medical Journal*, May 10th, 1913.

Pneumonia Prevention.

The end of the winter, far from bringing a termination to the danger from pneumonia, in reality marks the beginning of the season when this disease becomes an extremely serious cause of increase of mortality. This is true particularly in large cities. In recent years this increase has become more and more marked and is all the more striking because of the decrease in deaths from other infectious diseases. Pneumonia has been aptly termed the "Captain of the Men of Death," displacing tuberculosis which for so long occupied that "bad eminence." The most important problem before the medical profession at present is the reduction of the death-rate from pneumonia. Considering the nature of the disease and the intense strain which it imposes on the heart, it is probable that the only hopeful outlook for any considerable reduction in pneumonia mortality is through the prevention of the disease. The prospect of a cure for it, in the popular sense of that term, according to *The Journal of the American Medical Association*, has grown less as we have learned more about the disease. While pneumonia is most frequent during the colder portion of the year it is not dependent entirely on low temperature. The disease occurs at all seasons and in all climates. It does not work its greatest ravages in the colder climates, but is rather rare in the cold of high altitudes and is almost never known to occur within the Arctic circle. In spite of all their suffering from cold, Arctic explorers escape this danger. Hence we must assume that cold acts in conjunction with some other factor in the production of the disease. Pneumonia is favored by lack of sunlight and it occurs among those who are much exposed to dust or who have to breathe the emanations from the lungs of other people. Catarrhal processes affecting the air passage prepare the soil for the implantation of the germ of pneumonia. It is particularly a disease of city life and crowded living. With our present knowledge the prospects are hopeful for the control of pneumonia in the future through prevention. This is of special importance to the individual. The avoidance of pneumonia is largely a question of personal precautions that prevent the development of the disease by lessening the predisposition to it. Men in middle life, particularly those above fifty, must learn during unsettled weather to avoid crowds, especially when fatigued and when they have been for a number of hours without eating. Late at night, when for any reason a meal has been missed, crowds are dangerous. If this lesson could be generally learned there would be less pneumonia among the well-to-do classes. The principal danger comes in crowded street cars, which if possible should be avoided at rush hours. It needs to be emphasized that the danger from overcrowding is greatly enhanced by fatigue and going without food. In a word, the prevention of pneumonia is now much clearer than it was. Like all the other infectious diseases, instead of being a more or less inevitable dispensation it has come to be recognized as due to certain definite factors which can be greatly lessened by public and individual hygienic regulations.

School Diseases.

Children of school age contract such diseases as measles, scarlet fever and diphtheria much more frequently than older persons. All that has been learned about the modes of transmission of certain diseases, notably diphtheria, indicates that the taking of a large number of children out from their restricted family and neighborhood relationships and bringing them into contact with a much larger group will increase

the opportunities for infection. As regards opportunities for infection furnished by the school, it must be admitted that while the slate, the common drinking cup and the roller towel are fast passing away, sufficient facilities for the transfer of disease germs still exist in the friendly exchange of pocket handkerchiefs, lip-moistened lead pencils, chewing gum and the like. The school play ground, as well as the school room, must be considered in its bearing on the subject of school diseases. The significance of school attendance on the public health side lies not only in the assembling of children in a room, but also in the bringing into more or less intimate association a number of children who would otherwise not have met at all. Increasing the number of associates must necessarily increase the chances of infection. Diphtheria and scarlet fever show a marked increase in the autumn when the schools open and an equally definite decrease in the summer when the schools are closed.

The discovery of the part played by the healthy germ-carrier throws light on the probable origin of certain obscure cases of infection, says Prof. E. O. Jordan, of the University of Chicago, in a recent issue of *The Journal of the American Medical Association.* A child in a family in which a case of dphtheria exists may bear in its throat living diphtheria bacilli without manifesting any sign of the disease. If this child is allowed to enter school a playmate may acquire the bacillus without in its turn becoming definitely ill. This second child, however, may take the germ home and pass it on to a non-school-going child in the same family who then may develop a typical case of diphtheria. Methods of control of school and institutional outbreaks of diphtheria are therefore coming to be focused on the detection and exclusion of the carrier. Disinfection of innocent chairs and tables and enforced school closure are in general found to be less effective than the discovery and isolation of the living bearer of diphtheria germs. When school attendance is regulated by bacteriologic findings school epidemics quickly subside.

Railway Sanitation.

The advance of the railways of the country in applied sanitation has been marked. When one recalls the conditions allowed to exist in railway cars twenty years ago the present state of cleanliness is comparatively satisfactory. The railways are indeed to be commended for their gradual introduction of hygienic regulations that keep their cars, in spite of the numbers of people who travel in them every day, in a state that is not likely to endanger health. There remains, however, one phase of railway sanitation that will soon have to be dealt with. Though it is a difficult phase, there is no doubt that improvement of present conditions must come without delay. It would seem to be better for the railways to take up the problem of their own initiative rather than be forced into it by legal regulation. This is the present mode of disposing of the sewage of trains. In former years when population was less dense and when trains were not nearly so frequent and crowded, it was perhaps not so much to be deprecated that the railways should scatter sewage over the right of way. Now that railways cross thickly populated tracts of territory, and express trains pass through towns of considerable size without stopping, the crude disregard of hygiene in this matter is entirely out of keeping with present-day sanitary science, particularly as the railway rule is to have the toilets locked only during the times of stopping at stations, which gives oppor-

tunity for the scattering of offensive material, distinctly dangerous to health, even on the streets of towns. Railways frequently cross streams that are connected with water supplies, and the present custom may well prove a source of contamination of drinking water. It will not be long, says *The Journal of the American Medical Association*, before the general public wakes up to this serious danger. Now that we are carefully disposing of sewage in connection with our cities and are no longer allowing ordinary waterways to be contaminated as formerly, protection of our smaller streams will surely come to be felt as a necessity.

Anti-Typhoid Vaccination in Children.

The use of antityphoid vaccine among children has, as yet, received scant attention. Osler says that "typhoid fever is a disease of youth and early adult life. Of the 1,500 cases treated in Johns Hopkins Hospital, there were under 15 years of age, 231; between 15 and 20, 253; between 20 and 30, 680; between 30 and 40, 227; between 40 and 50, 88; between 50 and 60, 11."

In a recent issue of *The Journal of the American Medical Association*, Major Russell, of the Army Medical Corps, discusses the inoculation of 359 children, between the ages of 2 and 16 years, who have been vaccinated by fifty different physicians in many parts of the United States. No harmful effects have been reported in any of the 359 children and, so far as known, none has contracted typhoid fever, although some of the vaccinations were made over three years ago. Major Russell regards it as a particularly valuable method in the case of children and young people leaving home for summer vacations, schools, college, etc. The importance of checking typhoid among the young is shown by the fact that in the registration area of the United States there were in 1909, the last year for which complete mortality statistics are available, a total of 3,366 deaths from typhoid fever in patients under 20 years of age, out of a total of 10,722 of all ages, or almost one-third of all deaths from the disease. They were distributed according to ages as follows: Under 2 years, 97; under 3 years, 139; under 4 years, 132; under 5 years, 110; 5 to 9 years, 647; 10 to 19 years, 2,174. A very large proportion of these deaths can, without question, be prevented by the more frequent use of antityphoid vaccine.

The Health of London School Children.

Only in the last few years has the law required every child attending an elementary school to be physically examined on enterin and leaving and, therefore, statistics on the health of school children in England are only now available. About a million and a half of children are examined annually. The report of Sir George Newman, chief medical officer of the Board of Education for 1911, has just been issued. It shows the condition of 186,652 children in thirteen counties and sixteen urban areas and is far from satisfactory. Only in one urban area did the percentage of "good" nutrition reach 45 and from this figure it ranged down to as low as 3.8. Of 200,000 children examined in London more than half were found to be defective and over 78,000 were recommended for treatment. The malnutrition is due in the great majority of cases to ignorance of the relative value of foodstuffs and the means of using them economically and only in the minority to poverty. About 0.5 per cent. of the children are feeble-minded and of these about one-seventh are of such low grade

as to be uneducable. A summary of the report appears in the London letter in a recent number of *The Journal of the American Medical Association.*

From the Lay Press

A Spade a Spade.

From *Harper's Weekly:* "These causes he declared to be industrial labor among women, and alcohol and blood diseases among men."

It had been our hope that the one conspicuously and very greatly valuable result (among many doubtful ones) from the recent frank discussion of social vice and sex would be to put the word syphilis into the vocabulary of common discussion. To have made it possible to speak as freely and accurately about this disease as about the much less terrible tuberculosis would have been a hygienic and moral milestone.—*Collier's* May 3, 1913.

A Monument to the Greatest Modern Benefactor.

N. Y. Sun, May 2, 1913.

The beneficence of antisepsis which Sir Joseph Lister, of Edinburgh, has bestowed upon suffering humanity is shared by nearly every household in the world. Health, happiness and life itself will continue to be saved in cumulative proportions so long as the world is peopled, for of all discoveries for their preservation Lister's surgical antisepsis is the only one that is not assailed today.

Vaccination, for example, although the greatest life saving discovery, continues to be opposed hotly by many; our columns are burdened with protests and our waste basket with maudlin vaporings whenever *The Sun* ventures to advocate this effective preventive of a mutilating and death dealing malady. Nor did Lister escape the fate of all reformers. A New York surgeon of eminence once likened antisepsis to "the hocus pocus of the prestidigitateur" and attempted to sustain this view by citing one hundred amputations by Amussat without a death.

The marvelous dimunition of mortality under strict Listerian antisepsis, the disappearance of suppuration and other lethal sequels of surgical operations, emboldened surgeons in all countries to invade hitherto dreaded territories and converted always fatal operations into life savers. Volumes have been filled with the rehearsal of all the avenues to insure recovery that have been opened to the suregon. *The Sun* printed in its issue of April 7, 1912, a full account of "Marvels of Modern Surgery" and pointed out that these were made possible only by Lister's grand discovery.

A movement is now on foot to erect a monument to this greatest benefactor of modern times, a monument that shall proclaim to future generations the priceless benefits they are receiving from the labors of the patient, plodding Edinburgh scientist and surgeon, and, what is of far greater ultimate importance, that would stimulate others to emulate his grand example.

To the reflecting mind it is painful to note that the world honors the destroyer of life far more than the saver of life. History records the deeds and perpetuates all achievements on the field of carnage, and imposing monuments perpetuate the memory of the soldier. Monuments to those who have striven valiantly and often with sacrifice of life and health to save life are meagre in numbers and niggardly in proportion. Every schoolboy has an exalted idea of Alexander the great; is there one who has heard of Hippocrates? This physician is far greater than that illustrious general, because the

fruits of his achievements are today blessing mankind.

History proclaims the military achievements of Moltke, and his country is dotted with monuments to him and his generals while his contemporary Sir James Y. Simpson is barely mentioned; although this humble son of a baker in Edinburgh has freed woman from the primal curse, there is but one modest monument to perpetuate his memory, when every mother in the world may receive the boon he has bestowed upon woman.

Every American schoolboy is proud of the conquests of Winfield Scott. Does he know aught of Scott's greater contemporary Thomas G. Morton, the discoverer of ether, which banishes agonizing pain without cessation every day and night in all parts of the world? Which is the grander achievement, the conquest of Mexico, or the victory over unavoidable pain?

Is it the primal element of savagery surviving in man that prompts him to exalt the destroyer?

A committee has been formed in London to erect a worthy monument to Joseph Lister, the discoverer of antisepsis. Without doubt many contributions will be sent from this country. Not only should the surgeon who gained comfort and skill and the widening of usefulness aid this cause, but every individual who has experienced the beneficence of modern surgical methods made possible only by Lister, every human lover of his kind who admires conspicuous achievement in behalf of suffering humanity, must deem it a privilege to contribute to the Lister memorial fund.

THE SALE OF DR. FRIEDMANN'S CURE. *Editorial, N. Y. Sun, April 28, 1913.*

On the day of the arrival in this city of Dr. Friedrich Franz Friedmann *The Sun* printed an article under the caption "Fairness to a Foreign Scientist," in which we took the position that in the interest of suffering humanity and conformity with the American idea of fair play and no favor the foreign doctor should have an absolutely fair trial for his alleged cure. We maintained this position without advocating the treatment, since discussion of this phase of medicine is not within the policy of *The Sun*. Our position was quickly justified by the Public Health Service, which decided to subject the remedy to a fair clinical test.

While we estimate highly the maintenance of a high standard of ethics by the medical profession, a too narrow application of the altruistic spirit may be regarded as out of harmony with the conditions of modern life and its insatiate demand upon the hard worked and often unrequited doctor. We have therefore not been in accord with the too commonly accepted idea that Dr. Friedmann would merit ostracism if he concluded a commercial negotiation for his remedy. It would seem clear that the medical scientist is entitled to the same reward as the electrical or other scientist in financial emolument as well as in reputation. Especially erroneous is the view that suffering humanity may be injured by the commercialization of a medical discovery.

On the contrary, the preparation of a remedy by a reputable manufacturer insures its purity, whereas the publication of the formula must encourage competition that would necessarily lead to economy in the mode of preparation, with the probable result of deterioration in quality. This view is justified by results of Behring's diphtheria anitoxin. Especially menacing is the danger when a remedy demands skill and knowledge in its administration, as is claimed by Dr. Friedmann. These detrimental results to the sick

are obviated by the retention of control by Dr. Friedmann.

If it be true that the doctor has opposed a liberal system of free treatment to the poor, his course is, to say the least, disappointing, although a similar procedure has not operated against the successful use of similar agents, as Behring's antitoxin and salvarsan. Perchance the doctor may explain his reasons for adopting a course so opposed to his previous liberal expenditure of time and money exclusively for the treatment of the poor.

The purchasers of the remedy doubtless are aware of the risk they have undertaken in view of the facts that the positive value of the remedy has by no means been demonstrated here and that it is still subject to a decision by the Federal authorities. They may, however, rely upon the suggestive influence of a much exploited remedy to counteract this obvious risk.

Clarendon Doctors Meet.

The State.

Manning, May 1.—The regular monthly meeting of the Clarendon County Medical Association was held here yesterday afternoon with an unusually good attendance of the members. It was expected that a special paper would be read by Dr. Hagood Woods, of Florence, formerly of this county, but the doctor sent a message that he was unable to be present at this time. He promises to try to attend the next meeting, which will be held on the last Wednesday in May. The principal topic considered at the meeting yesterday was gastro-intestinal disorders, which elicited expressions from a majority of those present. After the adjournment of the regular session the members repaired to a cafe and spent a pleasant hour in the consideration of a fish fry luncheon that had been prepared under the thoughtful direction of Dr. W. S. Harvin, the secretary of the Association. It has been proposed to hold the next meeting at one of the lakes, where a fish fry and a day's outing may be enjoyed as a novel diversion.

Medical College Faculty Chosen. Success of Whirlwind Campaign for $75,000 Brings Praise From Board of Trustees, Which Extends Thanks to Contributors to New Building Fund.

News and Courier, April 30.

Members of the faculty of the State Medical College of South Carolina were elected yesterday afternoon by the Board of Trustees. The meeting was held in the Governor's office at Columbia, Mr. Blease being chairman of the board. Dr. Robert Wilson, Jr., of Charleston, had previously been chosen Dean. At yesterday's session, Dr. Lane Mullally was elected vice dean and Mr. Oscar W. Schleeter registrar. Charleston was complimented in resolutions for the success of the recent whirlwind campaign for a fund to be devoted to a new building for the Medical College, the structure to be erected opposite the Roper Hospital on a site given by the City of Charleston. Great interest was taken in Charleston in the choice of the faculty and many inquiries were made as to the personnel.

MEMBERS OF THE FACULTY.

Following were elected on the faculty, all of them being Charlestonians:

Anatomy—Professor of anatomy not filled; assistant professor of anatomy, Dr. W. Cyril O'Driscoll.

Bacteriology—Professor of bacteriology and hygiene, Dr. G. McF. Mood.

Chemistry—Professor of chemistry, Dr. F. L. Parker, Jr.

Dermatology and Syphilis—Clinical professor of dermatology and syphilis, Dr. J. A. Ball.

Materia Medica and Therapeutics—

Professor of materia medica, therapeutics and roentgenology, Dr. A. R. Taft.

Medicine—Professor of medicine, Dr. Robert Wilson, Jr.

Professor of the principles and practice of medicine, Dr. John L. Dawson.

Professor of clinical medicine, Dr. Joseph Maybank.

Clinical professor of medicine, Dr. Edward Rutledge.

Assistant professor of medicine and neurology, Dr. E. L. Jagar.

Clinical professor of pediatrics, Dr. W. P. Cornell.

Obstetrics—Professor of obstetrics, Dr. Lane Mullally. Assistant professor of obstetrics, Dr. G. Fraser Wilson.

Ophthamology, Otology, Rhinology and Larynology—Professor of Ophthalmology and otology, Dr. E. F. Parker. Professors of rhinology and larynology, Dr. C. W. Kollock, Dr. W. P. Porcher.

Pharmacy—Professor of pharmacy, and pharmacology, W. H. Zeigler, Ph. G.

Physiology and Embryology—Professor of physiology and embryology, P. M. Rea.

Pathology—Professor of pathology, to be filled.

Surgery—Professor of abdominal surgery, Dr. A. J. Buist. Professor of general surgery, Dr. C. M. Rees.

Professor of Gynecology—Dr. R. S. Cathcart.

Professor of principles of surgery and surgical pathology, Dr. C. P. Aimar.

Professor of genitourinary surgery, Dr. T. P. Whaley.

Clinical professor of abdominal surgery, Dr. A. E. Baker.

Assistant professor of surgery, Dr. A. J. Jervey.

Lecturers, instructors and other assistants will be elected by the faculty.

CHARLESTON CONGRATULATED.

The following resolution was adopted:

"Whereas, the citizens of Charleston and other friends of the State Medical College of South Carolina, have contributed the sum of $75,800 for the purpose of a new building for the institution; be it

"Resolved, by the Board of Trustees, That the thanks of the board are extended to each and every individual contributor to said institution, for their loyalty and assistance to the institution.

"Resolved, second, That the special thanks of the board be extended to the members of the various committees, who, by their efficient work, have made it possible to place this institution upon a first class basis."

The board adjourned to meet again in Charleston on June 2.

Those present at the meeting yesterday were: Governor Blease, Superintendent Swearingen, Drs. J. B. Black, Charles Sims, J. M. Davis, W. A. Tripp, R. E. Hughes, W. W. Fennell, and S. B. Fishburne. Dr. Robert Wilson, Jr., the dean, also attended the meeting.

Book Review

Men, Manners and Medicine—By Medicus Peregrinus. Table of Contents: Men, Manners and Medicine; Three American Men of Letters; Some Aspects of the Doctor; Some Modern Aspects of Heredity and Evolution; Homeric Physicians; The Sacrifice to Asklepios; Arthurian Physicians; Some Aspects of Modern Life; Four English Men of Letters; The Doctor's Year. Octavo, uncut edges, in heavy paper cover. Price, postpaid, One Dollar. W. M. Leonard, Publisher, 101 Tremont Street, Boston, Mass.

The Essays and Sketches which make up this collection originally appeared from time to time in the columns of the Boston Medical and Surgical Journal. They represent the observations of a doctor, from his professional point of view, on men and books and other phenomena, especially in relation to medicine. The reader may be not only entertained but instructed, as he realizes how abundantly the doctor's life

affords special opportunities for contact with larger interests outside the day's work.

* * *

Epidemic Cerebro-Spinal Meningitis—By Abraham Sophian, M. D., formerly with New York Research Laboratory. Twenty-three illustrations, St. Louis: C. V. Mosby Company, 1913. Price $3.00.

Owing to the widespread interest the frequent epidemics and many sporadic cases of this disease have elicited in recent years this book is indeed timely.

We have repeatedly alluded to the intrinsic merit of the monograph. The author's opportunities for research both in the laboratory and in the field have been most fortunate and the work reflects this in a clear cut manner.

* * *

The Surgical Clinics of John B. Murphy, M. D., at Mercy Hospital, Chicago. Volume II, No. II (April, 1913). Octavo of 171 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1913. Published bi-monthly. Price per year: Paper, $8.00; cloth, $12.00.

This volume is well up to the standard set by previous issues. It is well illustrated and exceedingly practical. A few of the subjects are given below:

Essential Hemorrhage of the Uterus—Hysterectomy (description of Dr. Murphy's operation for Hysterectomy); Gastric Ulcer, etc, a talk by Mr. Robert Milne, F. R. C. S., of London; further remarks by Mr Robert Milne, F. R. C. S., of London, England; Following an Operation by Dr. Murphy for Fracture of the Humerus and Colle's Fracture; Impacted Fracture of the Body of the First Lumbar Vertebra; Laminectomy; Rapid Recovery following Decompression of Cord; Fracture of Tibia and Fibula (Lane Plate); Recurrent Appendicitis—Rectrocecal Appendix with Description of Dr. Murphy's Proctoclysis.

* * *

The Operating Room and the Patient—Third edition rewritten and enlarged. By Russell S. Fowler, M. D., Chief Surgeon First Division, German Hospital, Brooklyn, N. Y. Octavo volume of 611 pages with 212 illustrations. Philadelphia and London: W. B. Saunders Company, 1913. Cloth, $3.50 net.

This is an extremely interesting book. It is not too large for ordinary every day reference and the price is reasonable. There is no doubt about the necessity for just such a handy work in every doctor's library. From the preface we quote the following which shows much of the scope of the volume:

"Whether a single operation is contemplated or a series, whether in a hospital or private house, the precautions to be observed are the same. It has been my purpose to simplify the technic as much as is compatible with careful work and to present the subject in a terse, yet, I hope, readable manner. Simplification and standardization are the keynotes of the hour; hence many of the early methods have been discarded for others which experience has proven efficient and better because simpler.

"Roughly, the underlying principles of successful surgical treatment may be summarized as follows: Careful anaesthesia, exact hemostasis, asepsis, rest of the injured part, use of the rest of the body, feeding advanced to normal as fast as the anesthetic weakened stomach can care for it, and the following of the general rules of hygiene."

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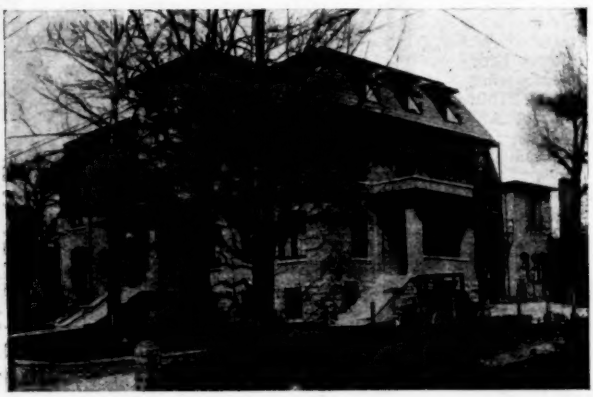

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